

Disaster and Emergency Management Resources

Anthrax Facts

Anthrax

- Anthrax is a serious disease caused by the bacterium *Bacillus anthracis*, There are three types of anthrax:
 - > skin (cutaneous)
 - lungs (inhalation)
 - digestive (gastrointestinal)

Infection

- Anthrax is not known to spread from one person to another.
- Humans can become infected with anthrax by handling products from infected animals or by breathing in anthrax spores from infected animal products (like wool, for example).
- People also can become infected with gastrointestinal anthrax by eating undercooked meat from infected animals.
- Anthrax also can be used as a weapon. This happened in the United States in 2001. Anthrax was deliberately spread through the postal system by letters sprinkled with powder containing anthrax. This caused 22 cases of anthrax infection.

Anthrax Dangers

- The Centers for Disease Control and Prevention classifies agents with recognized bioterrorism potential into three priority areas (A, B and C). Anthrax is classified as a Category A agent. Category A agents are those that:
 - > pose the greatest possible threat for a bad effect on public health
 - may spread across a large area or need public awareness
 - > need a great deal of planning to protect the public's health

• In most cases, early treatment with antibiotics can cure cutaneous anthrax. Even if untreated, 80 percent of people who become infected with cutaneous anthrax do not die. Gastrointestinal anthrax is more serious because between one-fourth and more than one-half of cases lead to death. Inhalation anthrax is much more severe. In 2001, about half of the cases of inhalation anthrax ended in death.

Symptoms of Anthrax Infection

- The symptoms (warning signs) of anthrax differ depending on the disease type:
 - Cutaneous: The first symptom is a small sore that develops into a blister. The blister then develops into a skin ulcer with a black area in the center. The sore, blister, and ulcer do not hurt.
 - ➤ Gastrointestinal: The first symptoms are nausea, loss of appetite, bloody diarrhea, and fever, followed by bad stomach pain.
 - ➤ Inhalation: The first symptoms of inhalation anthrax are like cold or flu symptoms and can include a sore throat, mild fever, and muscle aches. Later symptoms include cough, chest discomfort, shortness of breath, tiredness, and muscle aches. (Caution: Do not assume that just because a person has cold or flu symptoms that they have inhalation anthrax.)

Time Frame of Infection and Symptoms

• Symptoms can appear within seven days of coming in contact with the bacterium for all three types of anthrax. For inhalation anthrax, symptoms can appear within a week, or it can take up to 42 days for them to appear.

Anthrax Treatment

- Antibiotics are used to treat all three types of anthrax. Early identification and treatment are important.
 - Prevention after exposure. Treatment is different for a person who is exposed to anthrax, but is not yet sick. Health-care providers will use antibiotics combined with the anthrax vaccine to prevent anthrax infection.
 - Treatment after infection. Treatment is usually a 60-day course of antibiotics. Success depends on the type of anthrax and how soon treatment begins.

Anthrax Prevention

• There is a vaccine to prevent anthrax, but it is not yet available for general use. Anyone who may be exposed to anthrax, including certain members of the U.S. armed forces, laboratory workers, and workers who may enter or re-enter contaminated areas, may get the vaccine. Also, in the event of an attack using anthrax as a weapon, people exposed would get the vaccine.

After Anthrax Exposure or Infection

- If you are showing symptoms of anthrax infection, call your health-care provider right away.
- Contact local law enforcement immediately if you think that you may have been exposed to anthrax. This includes being exposed to a suspicious package or envelope that contains powder

Condensed from a Communicable Disease Center (CDC) article entitled "Anthrax: What You Need To Know"